CLAIMS

What is claimed is:

1.   1.   A method, comprising:

2   receiving information over a communications network;

3   retrieving validation rules from a rules library stored in a memory device; and

4   determining computer data validity by applying the retrieved validation rules to the

5   information.

1   2.   The method of claim 1, further comprising highlighting information determined to be

2   invalid by the validation rules.

1   3.   The method of claim 1, wherein validation rules are provided to a client.

1   4.   The method of claim 1, wherein validation rules are provided to a server.

1   5.   The method of claim 1, wherein validation rules are imbedded into a web page.

1   6.   The method of claim 1, wherein validation rules are executable both on a client and

2   server.

1   7.   A system, comprising:

2   means for receiving information over a communications network;

3   means for retrieving validation rules from a rules library stored in a memory device;

4   and

5   means for determining computer data validity by applying the retrieved validation

6   rules to the information.

1   8.   The system of claim 7, further comprising means for highlighting information

2   determined to be invalid by the validation rules.

1   9.   The system of claim 7, wherein validation rules are provided to a client.

1   10.   The system of claim 7, wherein validation rules are provided to a server.

1   11.   The system of claim 7, wherein validation rules are imbedded into a web page.

1   12.   The system of claim 7, wherein validation rules are executable both on a client and

2   server.

1   13.   Computer executable software code stored on a computer readable medium, the code,

2   comprising:

3   code for receiving information over a communications network;

4   code for retrieving validation rules from a rules library stored in a memory device;

5   and

6   code for determining computer data validity by applying the retrieved validation rules

7   to the information.

1   14.   The medium of claim 13, further comprising code for highlighting information

2   determined to be invalid by the validation rules.

1   15.   The medium of claim 13, wherein validation rules are provided to a client.

1   16.   The medium of claim 13, wherein validation rules are provided to a server.

1   17.   The medium of claim 13, wherein validation rules are imbedded into a web page.

1   18.   The medium of claim 13, wherein validation rules are executable both on a client and

2   server.

1   19.   An apparatus, comprising:

2   a memory device having at least one region for storing executable program code; and

3   a processor, disposed in communication with the memory device, for executing the

4   program code stored in the memory device, wherein the program code, further comprising:

5   code to receive information over a communications network;

6   code to retrieve validation rules from a rules library stored in a memory

7   device;

8   code to determine computer data validity by applying the retrieved validation

9   rules to the information.

1   20.   The apparatus of claim 19, further comprising code to highlight information

2   determined to be invalid by the validation rules.

1   21.   The apparatus of claim 19, wherein validation rules are provided to a client.

1   22.   The apparatus of claim 19, wherein validation rules are provided to a server.

1   23.   The apparatus of claim 19, wherein validation rules are imbedded into a web page.

1   24.   The apparatus of claim 19, wherein validation rules are executable both on a client

2   and server.

1   25.   A method, comprising:

2   identifying data types requiring validation; and

3   providing validation rules stored in a memory device for the associated data types

4   from a rules library.

1   26.   The method of claim 25, wherein validation rules are provided to a client.

1   27.   The method of claim 25, wherein validation rules are provided to a server.

1   28.   The method of claim 25, wherein validation rules are imbedded into a web page.

1   29.   The method of claim 25, wherein validation rules are executable both on a client and

2   server.

1   30.   A system, comprising:

2   means for identifying data types requiring validation; and

3   means for providing validation rules stored in a memory device for the associated

4   data types from a rules library.

1   31.   The system of claim 30, wherein validation rules are provided to a client.

1   32.   The system of claim 30, wherein validation rules are provided to a server.

1   33.   The system of claim 30, wherein validation rules are imbedded into a web page.

1   34.   The system of claim 30, wherein validation rules are executable both on a client and

2   server.

1   35.   Computer executable software code stored on a computer readable medium, the code,

2   comprising:

3   code for identifying data types requiring validation; and

4   code for providing validation rules stored in a memory device for the associated data

5   types from a rules library.

1   36.   The medium of claim 35, wherein validation rules are provided to a client.

1   37.   The medium of claim 35, wherein validation rules are provided to a server.

1   38.   The medium of claim 35, wherein validation rules are imbedded into a web page.

1   39.   The medium of claim 35, wherein validation rules are executable both on a client and

2   server.

1   40.   An apparatus, comprising:

2   a memory device having at least one region for storing executable program code; and

3   a processor, disposed in communication with the memory device, for executing the

4   program code stored in the memory device, wherein the program code, further comprising:

5   code to identify data types requiring validation;

6   code to provide validation rules stored in a memory device for the associated

7   data types from a rules library.

1   41.   The apparatus of claim 40, wherein validation rules are provided to a client.

1   42.   The apparatus of claim 40, wherein validation rules are provided to a server.

1   43.   The apparatus of claim 40, wherein validation rules are imbedded into a web page.

1   44.   The apparatus of claim 40, wherein validation rules are executable both on a client

2   and server.

1   45.   A method, comprising:

2   providing a rules library and an initial parent rule stored in a memory device; and

3   building validation rules by subclassing members of a rules library class hierarchy.

1   46.   The method of claim 45, further comprising storing subclassed validation rules in a

2   rules library.

1   47.   The method of claim 45, wherein the subclassed validation rules inherit validation

2   logic from a parent rule.

1   48.   The method of claim 45, wherein validation rules are associated with data types.

1   49.   The method of claim 45, wherein validation rules are imbedded into a web page.

1   50.   The method of claim 45, wherein validation rules are executable both on a client and

2   server.

1   51.   A system, comprising:

2   means for providing a rules library and an initial parent rule stored in a memory

3   device; and

4   means for building validation rules by subclassing members of a rules library class

5   hierarchy.

1   52.   The system of claim 51, further comprising means for storing subclassed validation

2   rules in a rules library.

1   53.   The method of claim 51, wherein the subclassed validation rules inherit validation

2   logic from a parent rule.

1   54.   The system of claim 51, wherein validation rules are associated with data types.

1   55.   The system of claim 51, wherein validation rules are imbedded into a web page.

1   56.   The system of claim 51, wherein validation rules are executable both on a client and

2   server.

1   57.   Computer executable software code stored on a computer readable medium, the code,

2   comprising:

3   code for providing a rules library and an initial parent rule stored in a memory device;

4   and

5   code for building validation rules by subclassing members of a rules library class

6   hierarchy.

1   58.   The medium of claim 57, further comprising code for storing subclassed validation

2   rules in a rules library.

1   59.   The method of claim 57, wherein the subclassed validation rules inherit validation

2   logic from a parent rule.

1   60.   The medium of claim 57, wherein validation rules are associated with data types.

1   61.   The medium of claim 57, wherein validation rules are imbedded into a web page.

1   62.   The medium of claim 57, wherein validation rules are executable both on a client and

2   server.

1   63.   An apparatus, comprising:

2   a memory device having at least one region for storing executable program code; and

3   a processor, disposed in communication with the memory device, for executing the

4   program code stored in the memory device, wherein the program code, further comprising:

5   code to provide a rules library and an initial parent rule stored in a memory

6   device;

7   code to build validation rules by subclassing members of a rules library class

8   hierarchy.

1   64.   The apparatus of claim 63, further comprising code to store subclassed validation

2   rules in a rules library.

1   65.   The method of claim 63, wherein the subclassed validation rules inherit validation

2   logic from a parent rule.

1   66.   The apparatus of claim 63, wherein validation rules are associated with data types.

1   67.   The apparatus of claim 63, wherein validation rules are imbedded into a web page.

1   68.   The apparatus of claim 63, wherein validation rules are executable both on a client

2   and server.

1   69.   A method, comprising:

2   marking data types for associated validation rules from a rules library stored in a

3   memory device; and

4   providing validation marked data types.

1   70.   The method of claim 69, further comprising building forms with validation rules

2   associated with marked data types.

1   71.   The method of claim 69, further comprising storing forms with validation rules

2   associated with marked data types.

1   72.   The method of claim 69, further comprising providing forms with validation rules

2   associated with marked data types over a communications network.

3   73.   The method of claim 69, wherein validation rules are imbedded into a web page.

1   74.   The method of claim 69, wherein validation rules are executable both on a client and

2   server.

1   75.   A system, comprising:

2   means for marking data types for associated validation rules from a rules library

3   stored in a memory device; and

4   means for providing validation marked data types.

1   76.   The system of claim 75, further comprising means for building forms with validation

2   rules associated with marked data types.

1   77.   The system of claim 75, further comprising means for storing forms with validation

2   rules associated with marked data types.

1   78.   The system of claim 76, further comprising means for providing forms with

2   validation rules associated with marked data types over a communications network.

3   79.   The system of claim 75, wherein validation rules are imbedded into a web page.

1   80.   The system of claim 75, wherein validation rules are executable both on a client and

2   server.

1   81.   Computer executable software code stored on a computer readable medium, the code,

2   comprising:

3   code for marking data types for associated validation rules from a rules library stored

4   in a memory device; and

5   code for providing validation marked data types.

1   82.   The medium of claim 81, further comprising code for building forms with validation

2   rules associated with marked data types.

1   83.   The medium of claim 81, further comprising code for storing forms with validation

2   rules associated with marked data types.

1   84.   The medium of claim 82, further comprising code for providing forms with validation

2   rules associated with marked data types over a communications network.

3   85.   The medium of claim 81, wherein validation rules are imbedded into a web page.

1   86.   The medium of claim 81, wherein validation rules are executable both on a client and

2   server.

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1   87.   An apparatus, comprising:

2   a memory device having at least one region for storing executable program code; and

3   a processor, disposed in communication with the memory device, for executing the

4   program code stored in the memory device, wherein the program code, further comprising:

5   code to mark data types for associated validation rules from a rules library

6   stored in a memory device;

7   code to provide validation marked data types.

1   88.   The apparatus of claim 87, further comprising code to build forms with validation

2   rules associated with marked data types.

1   89.   The apparatus of claim 87, further comprising code to store forms with validation

2   rules associated with marked data types.

1   90.   The apparatus of claim 88, further comprising code to provide forms with validation

2   rules associated with marked data types over a communications network.

1   91.   The apparatus of claim 87, wherein validation rules are imbedded into a web page.

1   92.   The apparatus of claim 87, wherein validation rules are executable both on a client

2   and server.

1   93.   A method, comprising:

2   identifying browser capability;

3   choosing a validation deployment, wherein the validation deployment comprising:

4   determining if a browser supports regular expressions, and if so, providing

5   validation rules to a client;

6   determining if the browser supports non regular expression language, and if

7   so, providing non regular expression language information validation;

8   determining if the browser does not support non regular expression language,

9   and if not, providing regex enabled validation on a server;

10   providing the browser with appropriate network location and validation rules;

11   obtaining information from a user; and

12   validating information with appropriate validation rules stored in a memory device.

1   94.   The method of claim 93, wherein validation rules are imbedded into a web page.

1   95.   The method of claim 93, wherein validation rules are executable both on a client and

2   server.

1   96.   A system, comprising:

2   means for identifying browser capability;

3   means for choosing a validation deployment, wherein the validation deployment

4   comprising:

5   means for determining if a browser supports regular expressions, and if so,

6   providing validation rules to a client;

7   means for determining if the browser supports non regular expression

8   language, and if so, providing non regular expression language information validation;

9   means for determining if the browser does not support non regular expression

10   language, and if not, providing regex enabled validation on a server;

11   means for providing the browser with appropriate network location and validation

12   rules;

13   means for obtaining information from a user; and

14   means for validating information with appropriate validation rules stored in a memory

15   device.

1   97.   The system of claim 96, wherein validation rules are imbedded into a web page.

1   98.   The system of claim 96, wherein validation rules are executable both on a client and

2   server.

1   99.   Computer executable software code stored on a computer readable medium, the code,

2   comprising:

3   code for identifying browser capability;

4   code for choosing a validation deployment, wherein the validation deployment

5   comprising:

6   code for determining if a browser supports regular expressions, and if so,

7   providing validation rules to a client;

8   code for determining if the browser supports non regular expression language,

9   and if so, providing non regular expression information validation;

10   code for determining if the browser does not support non regular expression

11   language, and if not, providing regex enabled validation on a server;

12   code for providing the browser with appropriate network location and validation

13   rules;

14   code for obtaining information from a user; and

15   code for validating information with appropriate validation rules stored in a memory

16   device.

1   100.   The medium of claim 99, wherein validation rules are imbedded into a web page.

1   101.   The medium of claim 99, wherein validation rules are executable both on a client and

2   server.

1　102.　An apparatus, the code, comprising:

2　　　　a memory device having at least one region for storing executable program code; and

3　　　　a processor, disposed in communication with the memory device, for executing the

4　program code stored in the memory device, wherein the program code, further comprising:

5　　　　　　code to identify browser capability;

6　　　　　　code to choose a validation deployment, wherein the validation deployment

7　comprising:

8　　　　　　　　code to determine if a browser supports regular expressions, and if so,

9　provide validation rules to a client;

10　　　　　　　　code to determine if the browser supports non regular expression

11　language, and if so, provide non regular expression information validation;

12　　　　　　　　code to determine if the browser does not support non regular

13　expression language, and if not, provide regex enabled validation on a server;

14　　　　　　code to provide the browser with appropriate network location and validation

15　rules;

16　　　　　　code to obtain information from a user; and

17　　　　　　code to validate information with appropriate validation rules stored in a

18　memory device.

1　103.　The apparatus of claim 102, wherein validation rules are imbedded into a web page.

1　104.　The apparatus of claim 102, wherein validation rules are executable both on a client

2　and server.